

Appendix I

Rocky Flats Health and Safety Addendum

This page intentionally left blank

Rocky Flats Health and Safety Addendum

Health and safety information, policies, and procedures for work at the Rocky Flats Site and office are provided in LMS manuals including, but not limited to:

Reference Procedure or Program	Applicable Section(s)
LMS/POL/S04321, <i>Health and Safety Manual</i>	Entire Manual
LMS/POL/S04326, <i>Comprehensive Emergency Management System</i>	Entire Manual
LMS/POL/S04324, <i>Construction Procedures Manual</i>	Entire Manual
LMS/POL/S04322, <i>Radiological Control Manual</i>	Entire Manual
LMS/PRO/S04337, <i>Health and Safety Procedures Manual</i>	Entire Manual

Additional Site-specific information is included in the RFSOG and in Site-specific procedures. This addendum provides Site-specific policies and information for use in preparing JSAs, procedures, and other work control documents.

Rocky Flats Adverse Weather Policy

In the event of adverse weather, the H&S representative will determine whether work can continue without compromising the health and safety of Site personnel. Adverse weather conditions that may affect safe performance of work tasks include:

- High winds;
- Heavy rainfall or hail;
- Tornadoes;
- Electrical storms and lightning;
- Snow and ice;
- Cold weather; and
- Hot, dry weather.

High Winds

Rocky Flats monitors wind speeds and issues wind advisories and warnings directly to cell phones via text messaging. Sustained (minimum 10 minutes) winds of 30 mph will require an H&S representative (or Field Operations Lead or Manager) to determine if work can continue safely.

- **Strong Wind Warning:** Winds in excess of 30 mph but less than 45 mph, with wind gusts up to 65 mph. Loose materials should be secured. Work on elevated surfaces must be reviewed and authorized by a Health and Safety representative before continuing. Employees should use extreme caution when traveling around the Site.
- **Gale Wind Warning:** Sustained (minimum 10 minutes) winds in excess of 45 mph but less than 55 mph, with wind gusts up to 75 mph. Employees should remain in vehicles if

possible or use extreme caution in choosing to walk outdoors. Outdoor work activities are limited to those reviewed and approved by a Health and Safety representative and all outside construction activities are curtailed.

- Whole Gale Wind Warning: Sustained (minimum 10 minutes) winds in excess of 55 mph but less than 65 mph, with wind gusts up to 85 mph. All outdoor work is curtailed. Personnel located in temporary building (east shed) will leave Site.
- Severe Force Wind Warning: Sustained (minimum 10 minutes) winds in excess of 65 mph, with wind gusts in excess of 85 mph. All outdoor work is curtailed.

Heavy Rainfall or Hail

In case of hail, move to a sheltered area or vehicle until the hail passes. Heavy rainfall may cause slippery conditions or flash floods. Use extra caution when walking during or after heavy rainfall. If working in an area with suspected radioactive contamination, work should be suspended during wet conditions because radiation and contamination monitoring may not be effective in wet conditions.

Tornadoes

Meteorological conditions will be closely watched, especially in the spring, when severe thunderstorms and tornadoes are most likely to occur. Tornadoes are usually preceded by severe thunderstorms with frequent lightning, heavy rains and strong winds. Tornadoes are very unlikely at the Rocky Flats Site because of the proximity to the mountains. A tornado is destructive when it descends to earth, where its path may vary from 50 yards to one mile in width. Wind speed inside a tornado can reach up to 300 mph. Its forward speed will average 25 to 40 miles per hour.

- Stay Tuned for Storm Warnings
 - Listen to commercial radio station emergency broadcasts for updated storm information
 - Know what a tornado WATCH and WARNING means
 - A tornado WATCH means a tornado is possible in your area
 - A tornado WARNING means a tornado has been sighted and may be headed for your area. Go to safety immediately.
 - Work may continue during severe thunderstorm watches or tornado watches unless wind exceeds standards or lightning has been identified in the area
 - Check cellular phone for weather emergency text messages
- **When a Tornado WATCH is issued....**
 - Be alert to changing weather conditions. Blowing debris or the sound of an approaching tornado may alert you. Many people say it sounds like a freight train.

- **When a Tornado WARNING is issued....**
 - If outside, lie flat in a ditch or low-lying area
 - If in a car, get out immediately and head for safety (as above)
- **If you are in the open....**
 - Move at right angles to the tornado
 - Lie flat in a ditch or depression, avoiding areas subject to rapid water accumulation or flooding in heavy rains
 - Do not try to outrun a tornado
- **After the tornado passes.....**
 - Stay out of the damaged area
 - Report to the assembly area (east shed parking lot)
 - Do not use candles at any time. Do not use matches or lighters, in case of leaking natural gas pipes or fuel tanks nearby.

Electrical Storms and Lightning

Electrical storms commonly occur in the Denver region during spring, summer, and fall. The resulting lightning poses a safety hazard to field personnel or to office personnel in some instances. During lightning warnings, H&S will require the curtailment of work on elevated surfaces, open fields or next to water.

The distance to an electrical storm can be estimated by observing the interval between the lightning flash and the sound of thunder. Because sound travels approximately 1,100 feet per second, the interval of five seconds corresponds to a storm distance of approximately 1 mile. By counting the seconds between the flash and the thunder and dividing by 5, you can estimate your distance from the strike (in miles). If an electrical storm is observed within 3 miles of the Site (15 seconds between lightning strike and thunder clap), all activities are to be ceased. Personnel working near water should suspend activities immediately and move away from the water at the first sight of lightning. If caught in the open by an electrical storm and vehicles are inaccessible, personnel will move to a topographically low area away from tall objects and conductors (e.g., power lines, metal sheds) and wait for the storm to leave the area. Work will be suspended a minimum of 30 minutes after the last lightning strike.

Snow and Ice

Snow and ice are a leading cause of injuries and car accidents in winter months. Employees are strongly encouraged to stay informed of changing weather conditions and assess the weather outside before beginning outdoor work.

Boots or shoes with good tread are essential for walking on snow or ice. Be aware that warm shoes can melt the snow beneath them and cause a slick surface to form. When first exiting a vehicle or building, rub your shoes on the snow to acclimate them to the outside conditions. Take your time, take small steps, and walk slowly with a “closed gait.” By wearing gloves you will be able to keep your hands out of your pockets, which enables you to use your arms and hands to

maintain and adjust your balance when walking on slick surfaces. Do not carry bulky or heavy loads that do not allow you to maintain at least one free hand. Snow and ice increase the hazards from walking on uneven terrain or near ponds and streams. Personnel will wear boots with good soles, move cautiously, and use the buddy system.

Driving on roads covered with snow and ice requires extra caution. Clear the snow and ice off all windows, the front hood of the vehicle, and mirrors before driving. Clear ice from windshield wiper blades. Check windshield cleaner fluid to ensure an adequate supply.

Give yourself extra distance behind vehicles in snow and ice conditions. Allow extra stopping time at intersections and traffic signals and watch for other vehicles that may not be able to stop at the intersection. Wear your seat belt. Know whether your vehicle has anti-lock brakes and the best technique for stopping your vehicle on a slippery surface.

Cold Weather

Cold weather, especially when accompanied by wind or wet weather, can lead to frostbite or hypothermia. During cold weather, personnel are strongly encouraged to follow recommendations for personal protective equipment (PPE) and winter weather gear. The buddy system should always be used when working outdoors for prolonged periods in cold weather.

Hot, Dry Weather

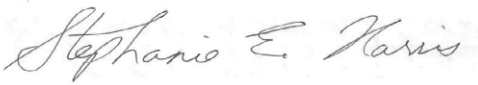
Heat stress and dehydration can result when working for prolonged periods outdoors in hot weather, especially when wearing certain PPE. Employees are strongly encouraged to drink plenty of fluids when working outdoors in hot weather. Avoid caffeinated drinks. Sunblock or sunscreen is recommended for preventing sunburn.

Personal Protective Equipment

The following PPE will be used for the identified work activities. Other activities and PPE will be described in task-specific JSAs.

Activity	Head/Face	Foot	Hands	Respiratory	Clothing
General Site activities, tours	None required	Closed toe sturdy shoes/boots	None required	None required	Long pants, weather appropriate gear
Sampling	Safety glasses as necessary	Closed toe sturdy boots	Work gloves as necessary	N 95 dust mask, if desired	Long pants, weather appropriate gear
Revegetation activities	Safety glasses as necessary, Helmet when on ATV	Closed toe sturdy boots, safety toe boots if mowing	Work gloves as necessary	N 95 dust mask, if desired	Long pants, weather appropriate gear
Mowing activities	Safety glasses as necessary, Helmet when on ATV	Safety toe boots	Work gloves as necessary	N 95 dust mask, if desired	Long pants, weather appropriate gear
Chainsaw activities	Safety glasses, chainsaw full face helmet	Safety toe boots	Leather work gloves	None required	Chainsaw chaps, long sleeved shirt
Cleaning of east shed	Safety glasses, as desired	Closed toe sturdy shoes	Work gloves as necessary	N 95 dust mask, if desired – when sweeping, cleaning off dusty shelves	Long pants, weather appropriate gear

The following competent person certifies that a hazard assessment for the identified activities has been performed and the selection of personal protective equipment is based on best available information.

Printed name	Signature	Date
Stephanie E. Harris		12/15/2008

Training Requirements

The following minimum training is required for LMS personnel:

<p>All LMS personnel: EC 100, Environmental Management System Awareness,</p> <p>IT 100, Computer Security Awareness,</p> <p>SC 100LM, Security Education & Awareness Briefing,</p> <p>SC 101, UCNI Awareness,</p> <p>HS 100, Integrated Safety Management System Awareness,</p> <p>HS 101, Hazcom Awareness,</p> <p>SC 102, Counterintelligence Awareness Briefing,</p> <p>RM 100, Hummingbird Training for Contractor Employees,</p> <p>HS 103, 10 CFR 851 training,</p> <p>EP 100, Environmentally Preferable Purchasing,</p> <p>EA 100, Enterprise Architecture training</p> <p>Rocky Flats Office Access and Health and Safety Read and Sign Agreement</p> <p>Other training as identified by the LMS Training department, including position-specific training as identified on each employee's Individual Training Plan</p>	<p>Additional Training for Field Personnel: Rocky Flats Site Access and Health and Safety Read and Sign Agreement</p> <p>RF01, Rocky Flats Orientation</p> <p>Defensive Driver Training</p> <p>Snake Bite Training</p> <p>First Aid/CPR (for required employees)</p> <p>Required Training for Field Subcontractors</p> <p>Rocky Flats Site Access and Health and Safety Read and Sign Agreement</p> <p>RF01, Rocky Flats Orientation,</p> <p>RF03, Hazcom Awareness,</p> <p>RF05, Security Awareness Briefing,</p> <p>RF07, Thermal Stress</p> <p>Required Training for Visitors: Office: Rocky Flats Office Access and Health and Safety Read and Sign Agreement</p> <p>Site: Rocky Flats Site Access and Health and Safety Read and Sign Agreement</p>
--	---